



Town of Belmont

Belmont Center Parking Study Monday, December 12, 2011



Guiding Principles

- Provide convenient parking for **customers / clients**
- Establish clear Town and private **employee parking** areas
- Accommodate **commuter parking** appropriately
- Protect residential neighborhoods from spillover



Developing a Parking Management Plan

- Parking Supply and Demand Analysis
 - Identify Existing Conditions
 - Parking Utilization Data Collection
 - Utilization Database and Mapping
- Parking User Profile
 - Online Survey ~ 250 respondents
 - Business Association Meeting
 - Public Open House
 - Man-on-the-street interviews ~ 100 respondents
- Strategy Development, Best Practices, and Recommendations
- Feedback from Business Community
- Parking Management Plan

Parking Management Plan

Issues

Best Practices

Recommendations

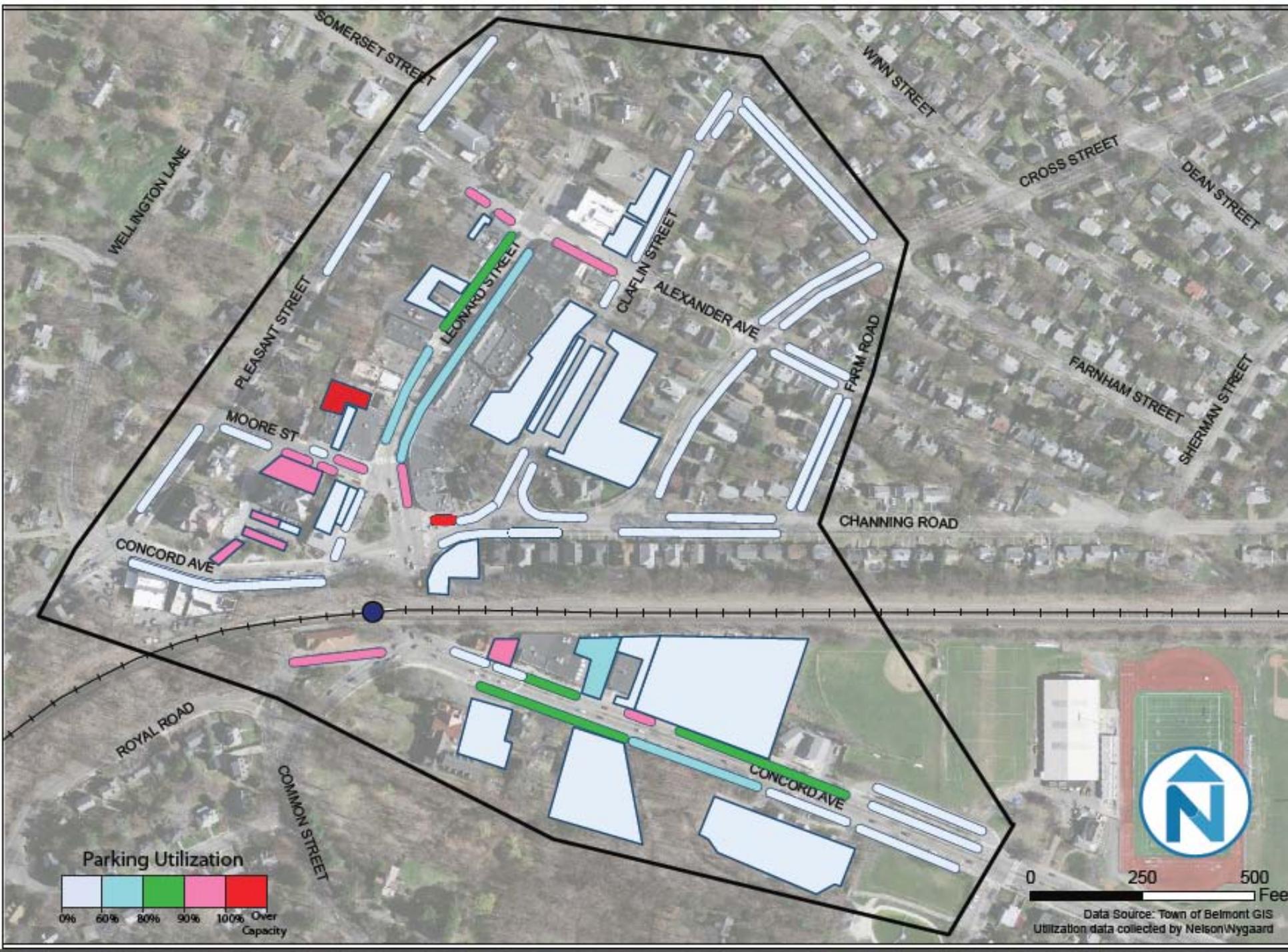
1. Lack of attractive employee parking



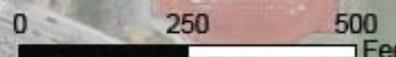
Issue #1: Employee Parking



- Heavy daytime utilization of core streets is inconsistent with the lower amount of daytime retail activity
- Employees often occupy spaces on prime streets



Parking Utilization



Data Source: Town of Belmont GIS
Utilization data collected by Nelson\Nygaard

Issue #1: Employee Parking



- Signing and encouragement will not change behavior

Issue #1: Employee Parking



- More aggressive enforcement could change behavior but does not send the right message (it is already aggressive)

Issue #1: Employee Parking



- Cost of Claflin Lot is a disincentive: \$3/day (exact change) or \$60/month – everywhere else is free
- Pay station in Claflin Lot is old and less reliable, i.e. lost revenue

Issue #1: Employee Parking



- Back of the Clafin Lot often underutilized



Parking Management Plan

Issues

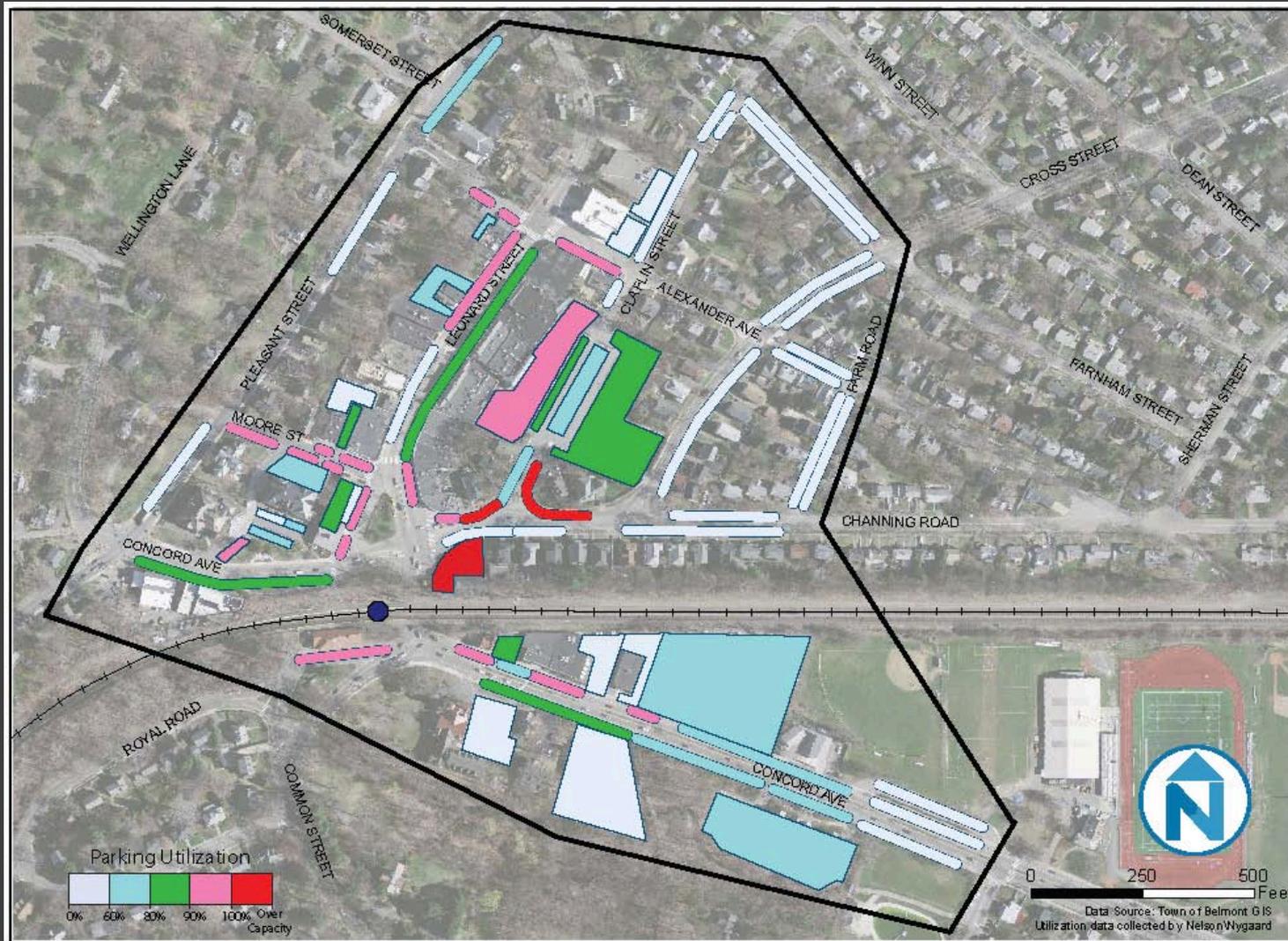
Best Practices

Recommendations

1. Lack of attractive employee parking
2. Prime spaces are difficult to find



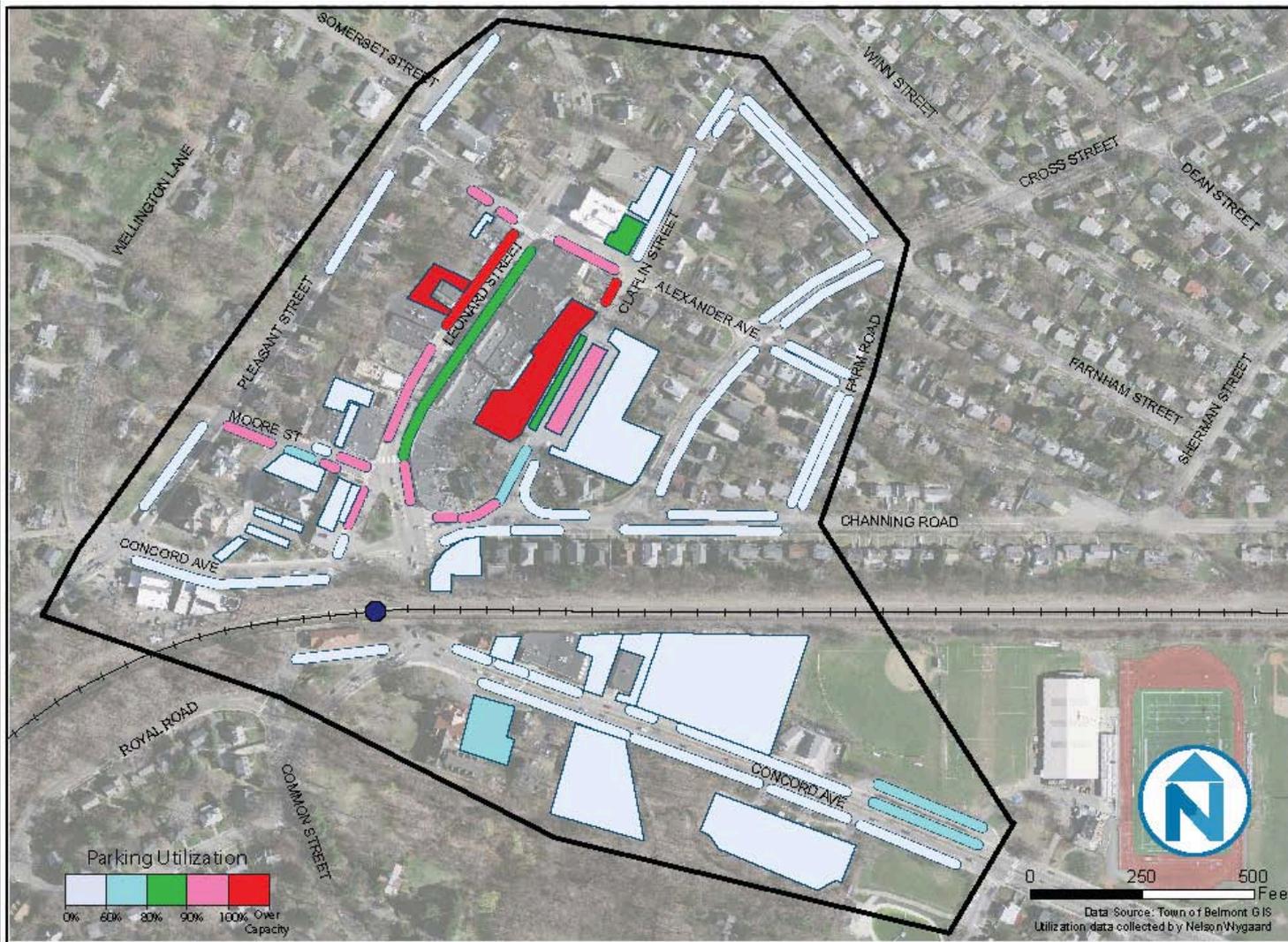
Issue #2: Customer Parking



- Prime customer spaces are difficult to find at prime times
- Lack of available front-door spaces for customers hurts business

Thurs, noon-2pm

Issue #2: Customer Parking

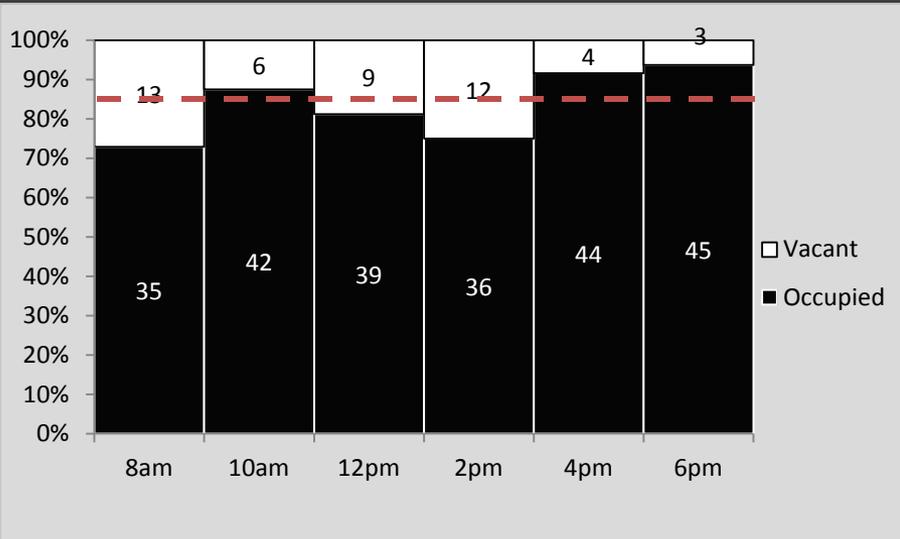


- Little desire to use parking lots

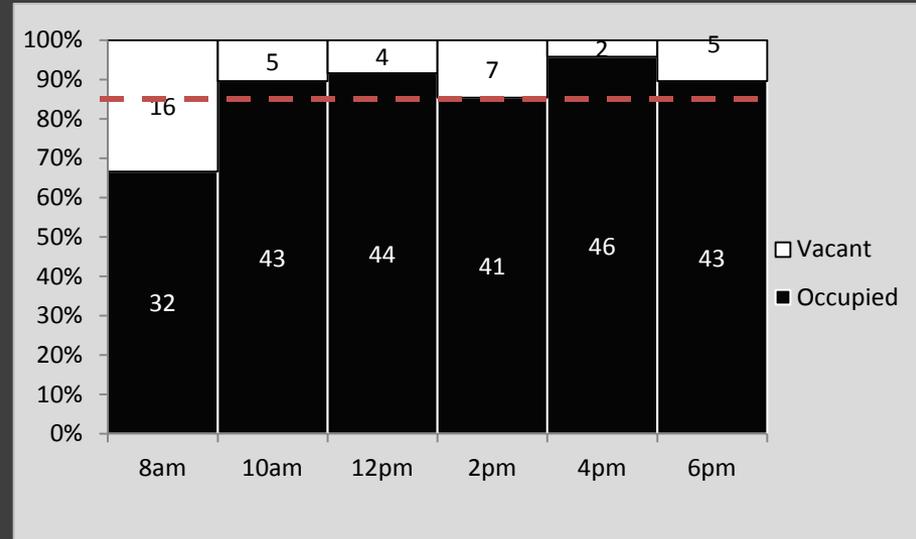
Sat, 6pm-8pm

Issue #2: Customer Parking

Leonard Street Availability



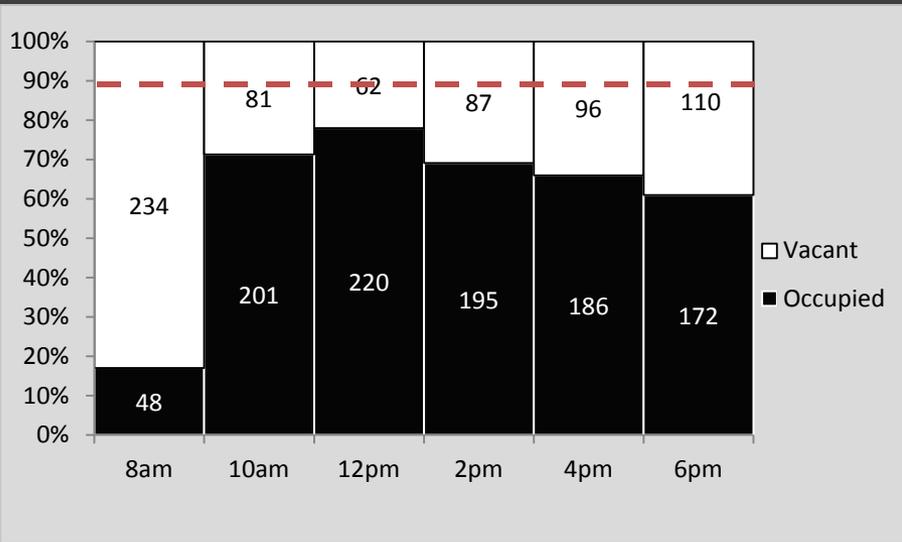
Thursday



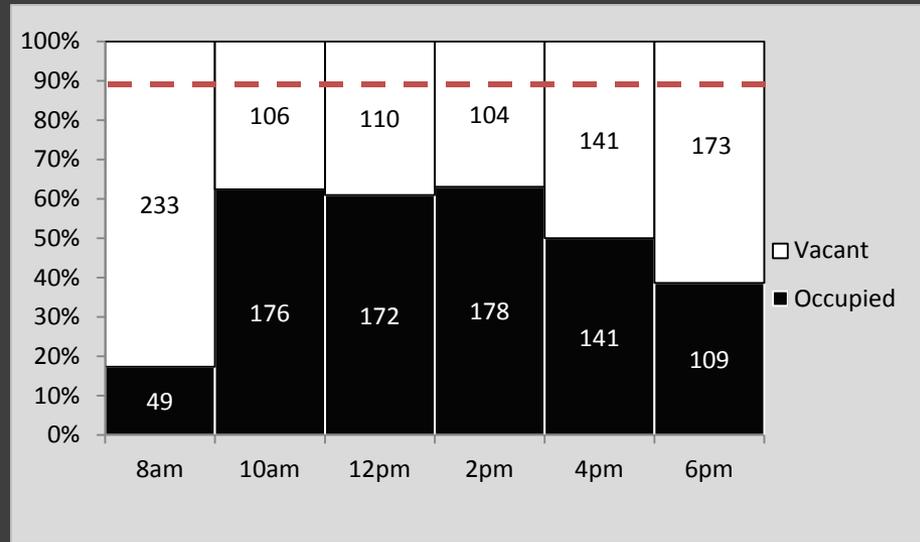
Saturday

Issue #2: Customer Parking

Claflin Lot Availability



Thursday

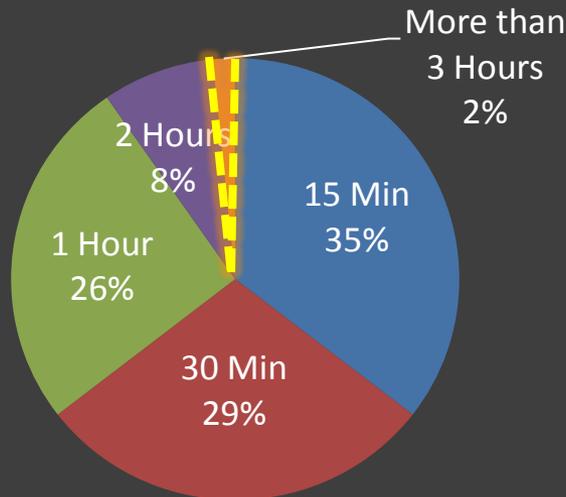


Saturday

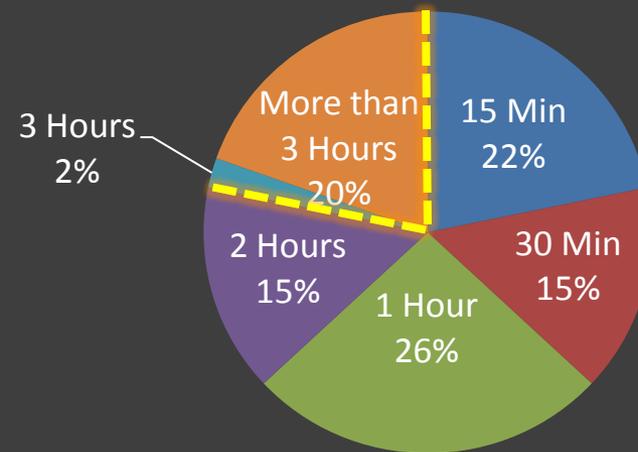
Issue #2: Customer Parking

Man-on-the-Street Interviews:

On-Street



Off-Street



Parking Management Plan

Issues

1. Lack of attractive employee parking
2. Prime spaces are difficult to find
3. No designated commuter parking

Best Practices

Recommendations



Commuter Parking



- There is no designated commuter parking to accommodate demand, threatening closure of Belmont Center Station

Commuter Parking – Royal Road



- Unregulated prime spaces at station filled all day, discouraging kiss & ride or short-term transit use

Commuter Parking – Royal Road



- Many underutilized on-street spaces that could be used for commuter parking

Parking Management Plan

Issues

Best Practices

Recommendations

1. Lack of attractive employee parking
2. Prime spaces are difficult to find
3. No designated commuter parking
4. Lack of access/signage



Poor Sidewalk Conditions and Lighting



Access to Leonard Street



- Unclear on how to access Leonard Street from Clafin Lot

Access to Leonard Street



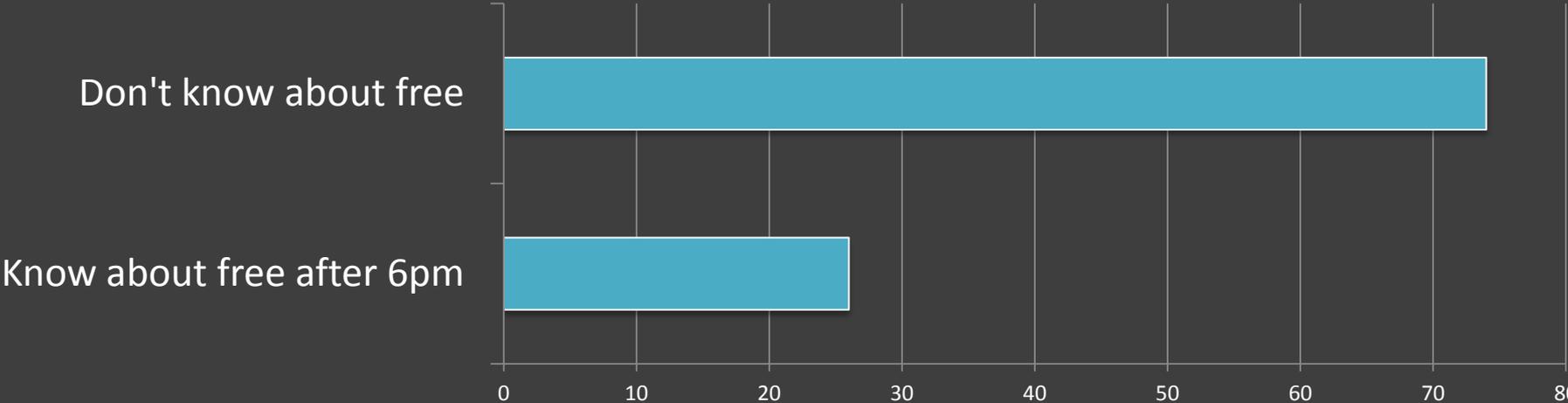
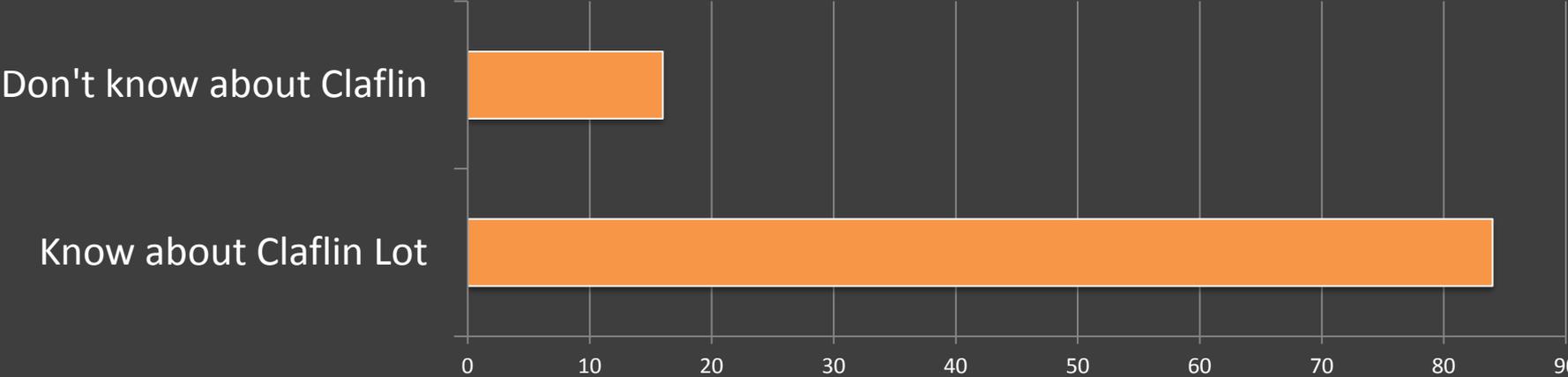
Access to Leonard Street



- Lack of signage connecting Leonard Street to Claflin Lot
- Which stores can be cut through
- Unsure of which stores are open

Claflin Lot

Man-on-the-Street Interviews (of people that parked on-street)



Lot Entrance Signage



Welcome! We want you to park once (here) (and then shop and dine).

Middle of the Claflin Lot



- Invisible signage to distinguish pay spaces and two-hour free spaces

Parking Management Plan

Issues

Best Practices

Recommendations

1. Lack of attractive employee parking
2. Prime spaces are difficult to find
3. No designated commuter parking
4. Lack of access/signage
5. Outdated technology



Issue #5: Payment Technology

- Claflin Lot pay station – bills and coins only
- No change given
- Permit purchase in-person only



Parking Management Plan

Issues

Best Practices

Recommendations

1. Lack of attractive employee parking
2. Prime spaces are difficult to find
3. No designated commuter parking
4. Lack of access/signage
5. Outdated technology

Other Issues

- New parking supply will be needed in long-term
- Heavy reliance on sufficient off-street parking
- Business loading needs
- Lack of alternatives to the car

Parking Management Plan

Issues

1. Lack of attractive employee parking
2. Prime spaces are difficult to find
3. No designated commuter parking
4. Lack of access/signage
5. Outdated technology
6. Balanced transportation system

Best Practices

1. Demand-responsive parking management

Recommendations

Example: Redwood City, CA

- Plagued by traditional parking “problems”:
 - 100% utilization on Broadway all day long
 - Perception of parking unavailability



Photo by BWChicago

- BUT:
 - Ample unused parking around the corner from commercial strip
 - Peak occupancy 69% in city-owned lots (ideal is 85%); 78% at the height of the dot-com boom

Example: Redwood City, CA

- City staff asked, “Do we actually have a parking *shortage*, as perceived by motorists, or a parking *management* problem?”
- Decided on a strategy set:
 1. Institute Market-Rate Pricing
 2. Eliminate Time Limits
 3. Convert the Core to Computerized “Pay-by-Space” Meters
 4. Modify the Parking Permit Program



REDWOOD CITY
Downtown
Parking Map

FREE PARKING
EVENINGS &
WEEKENDS

County
Garage

San Mateo
 County
 Government
 Center



LEGEND

-  **FREE** every evening and all day Saturday and Sunday
 (see signs at these facilities for details)
-  **25¢ per hour**, Monday - Friday, 10am to 6pm
 (FREE after 6:00pm and all day Saturday and Sunday)
-  **25¢ per hour**, Monday - Saturday, 10am to 6pm
 (FREE after 6:00pm and all day Sunday)
-  **50¢ per hour**, Monday - Saturday, 10am to 6pm
 (FREE after 6:00pm and all day Sunday)
-  **First 1.5 hours FREE** or
First 4 hours FREE with a validation from Century Theatres
 (see signs at these facilities for details)

ALL RATES AND HOURS SUBJECT TO CHANGE

AUGUST 2009

Hours of Operation

Sunday - Thursday

11 AM to 8 PM

Friday - Saturday

11 AM to 12 midnight

Except Holidays

Example: Redwood City, CA

- #2: Eliminate Time Limits
 - Time limits impose an artificial restriction on usage and are inconvenient
 - Enforcement is costly to manage
 - Time limits not efficient at producing even 85% occupancy
 - Allow pricing to create turnover instead

Why Time-Limits Don't Work

- It's free to do the 2-hour roll
- Lessons from U.S. best practices:
 - Why would you give somebody a ticket if they decided to get a dessert and do an errand after lunch?
 - A time-limit effectively says, “you’re no longer welcome in our downtown.”
 - If people are willing to use the “carrot” of paying their way, why drive them away with the “stick” of a violation penalty?



Example: Redwood City, CA

- #3: Convert to Pay-by-Space Meters
 - Able to track occupancy rates and adjust price rates accordingly
 - A host of other benefits:
 - Better urban design
 - Quicker repairs
 - Solar power
 - Better information
 - Revenue control
 - Better data collection
 - Convenience



Source: Digital Payment Technologies, 2005

Example: Redwood City, CA

- #4: Modify the Parking Permit Program
 - To accommodate employees, crafted a parking permit program for spaces in garages with varying levels of access for purchase



Permit Type	Valid Locations and Times	Monthly Cost
Marshall / Middlefield BRONZE	Marshall Garage: Monday - Friday, 6am until 7pm Middlefield Lot: Monday - Friday, 6am until 7pm	\$30.00
Marshall / Middlefield SILVER	Marshall Garage: Monday - Friday, 6am until Midnight Middlefield Lot: Monday - Friday, 6am until 7pm	\$35.00
Marshall / Middlefield GOLD	Marshall Garage: Monday - Sunday, 6am until Midnight Middlefield Lot: Monday - Friday, 6am until 7pm	\$40.00

Example: Redwood City, CA

- Program has been highly successful:
 - Greater turnover and parking distributed more evenly across district
 - Average length of stay 72 minutes (previously 1 hour limit)
 - Monthly permit sales up 50%
 - \$1 million in added revenues for added public services such as increased police protection and cleaner sidewalks
 - 82% occupancy on Broadway

Parking Management Plan

Issues

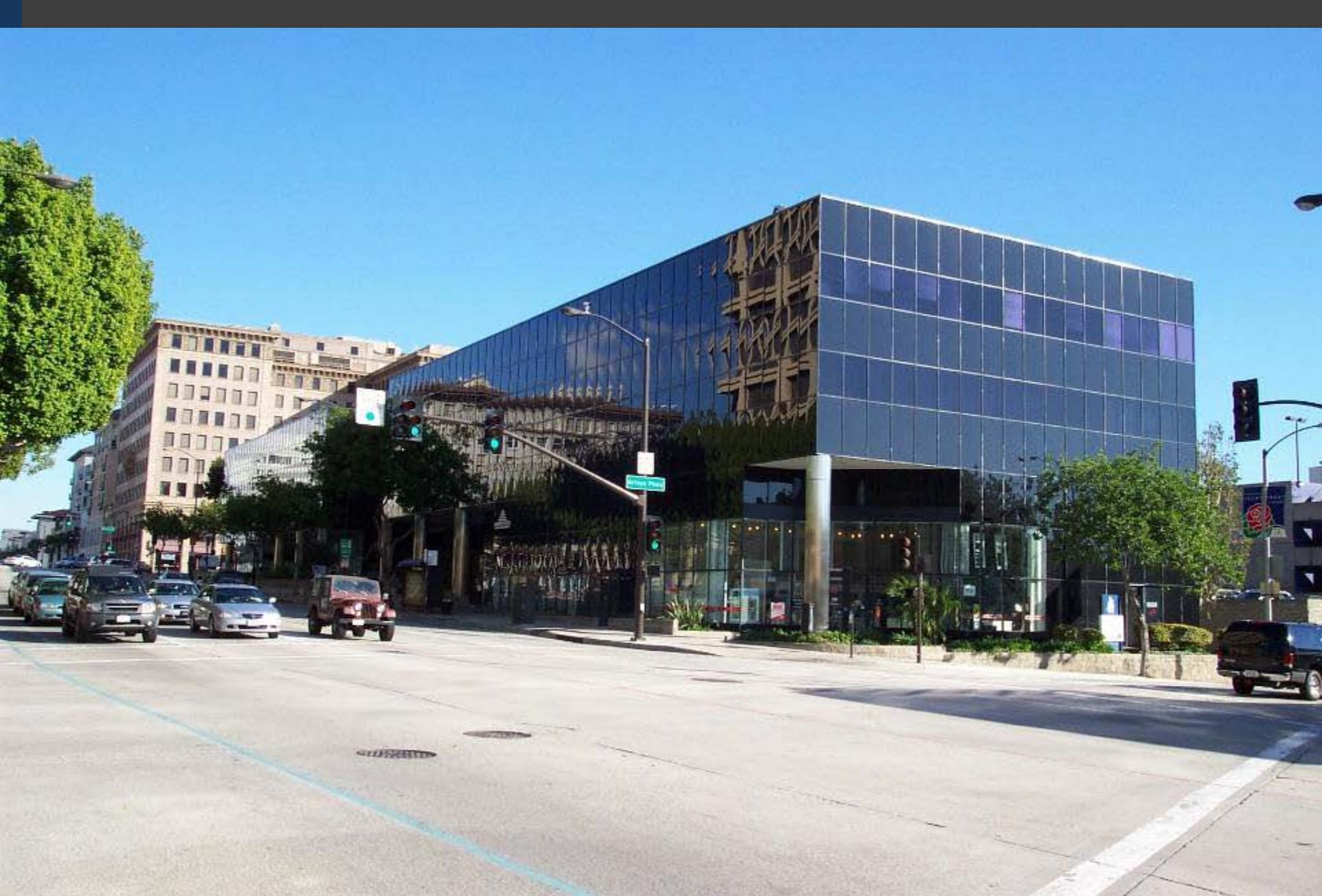
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Best Practices

1. Demand-responsive parking management
2. Parking benefit districts

Recommendations





**A NEW
OLD PASADENA
COMING SOON**

STREET AND ALLEY WAY IMPROVEMENTS:

LIGHTING

REPAVING

TRASH RECEPTACLES

SIGNS AND BENCHES

DIRECTORY MAPS

TREES AND GRATES

NEWSRACKS

MAINTENANCE

SAFETY

**YOUR METER MONEY IS
MAKING A DIFFERENCE**

THE OLD PASADENA RENAISSANCE CONTINUES

CITY OF PASADENA



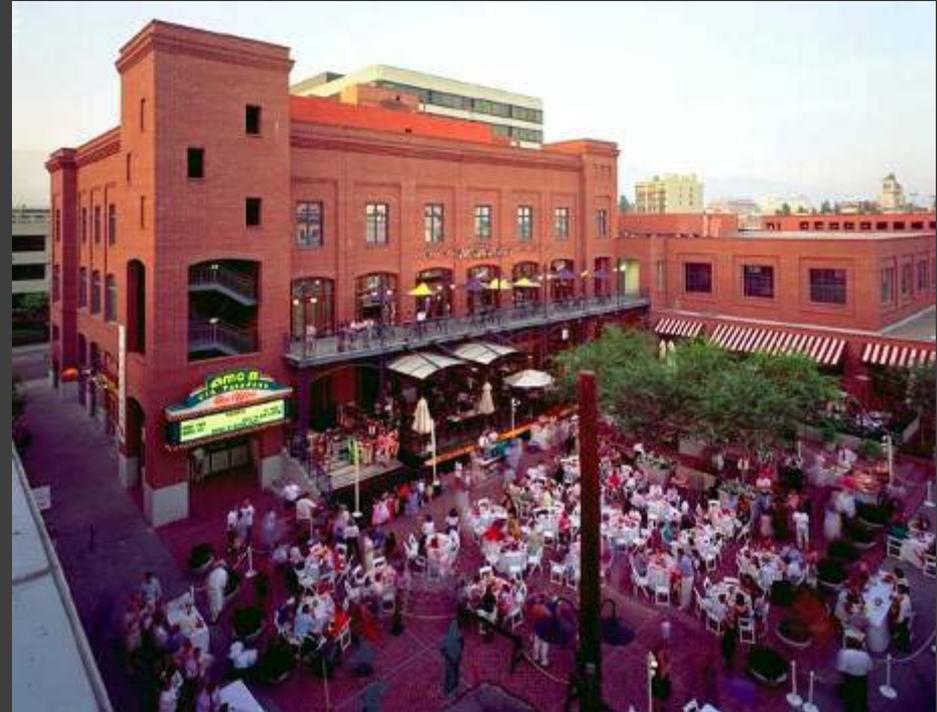






Old Town Pasadena Parking Benefit District

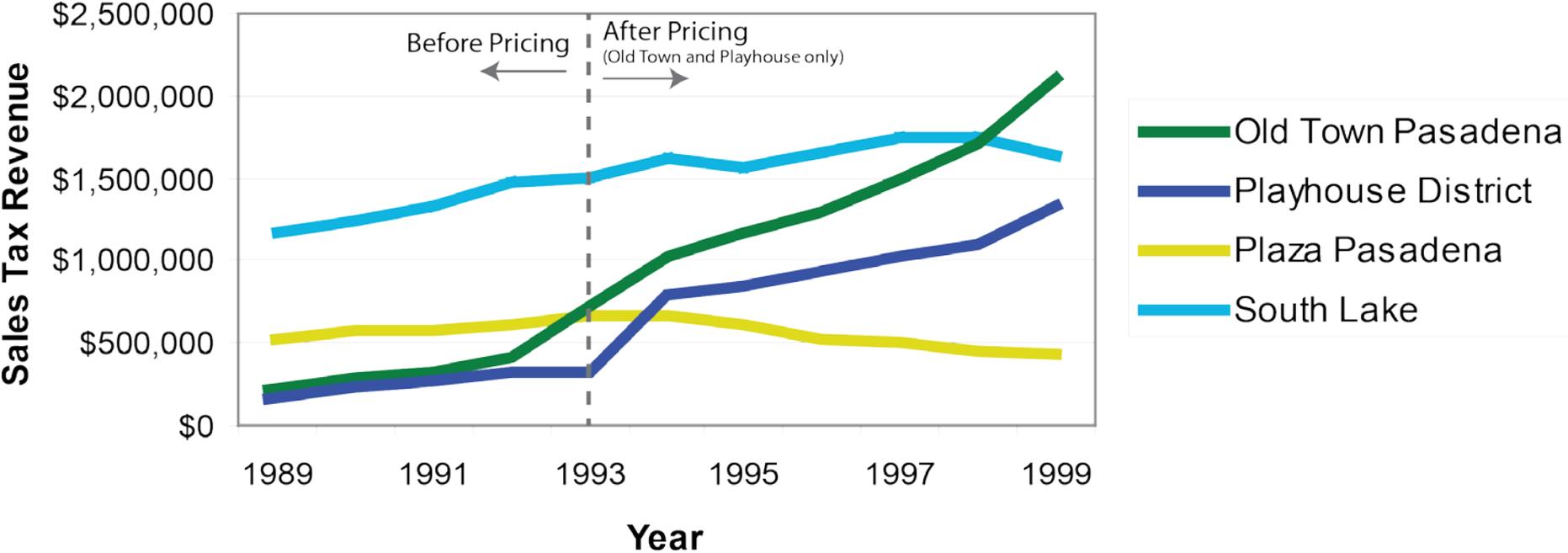
- Meters installed in 1993: \$1/hour
- Revenue today (including parking garages): \$5.4 million annually
- Funds garages, street furniture, trees, lighting, marketing, mounted police, daily street sweeping & steam cleaning



The meters yield about \$50 per front foot per year

**Old Pasadena, 1992-99:
Sales Tax Revenues Quadruple**

Pasadena Retail Sales Tax Revenue



Downtown Opportunities – Landscape Greening



Lessons Learned

- Communities should dedicate parking meter revenue to the districts that produce it.
- Merchants will insist on charging market prices for curb parking.
- Meter revenues can greatly improve the public infrastructure of older areas.



Parking benefit districts

Commercial:

- Ann Arbor, MI
- Oak Park, IL
- Pasadena, CA
- San Diego, CA
- Redwood City, CA
- Seattle, WA

Commercial & Residential:

- Washington, DC
- Aspen, CO
- Boulder, CO
- Santa Cruz, CA
- Tucson, AZ
- West Hollywood, CA
- Austin, TX

Parking Management Plan

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Best Practices

Recommendations

- | | | |
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West Medford

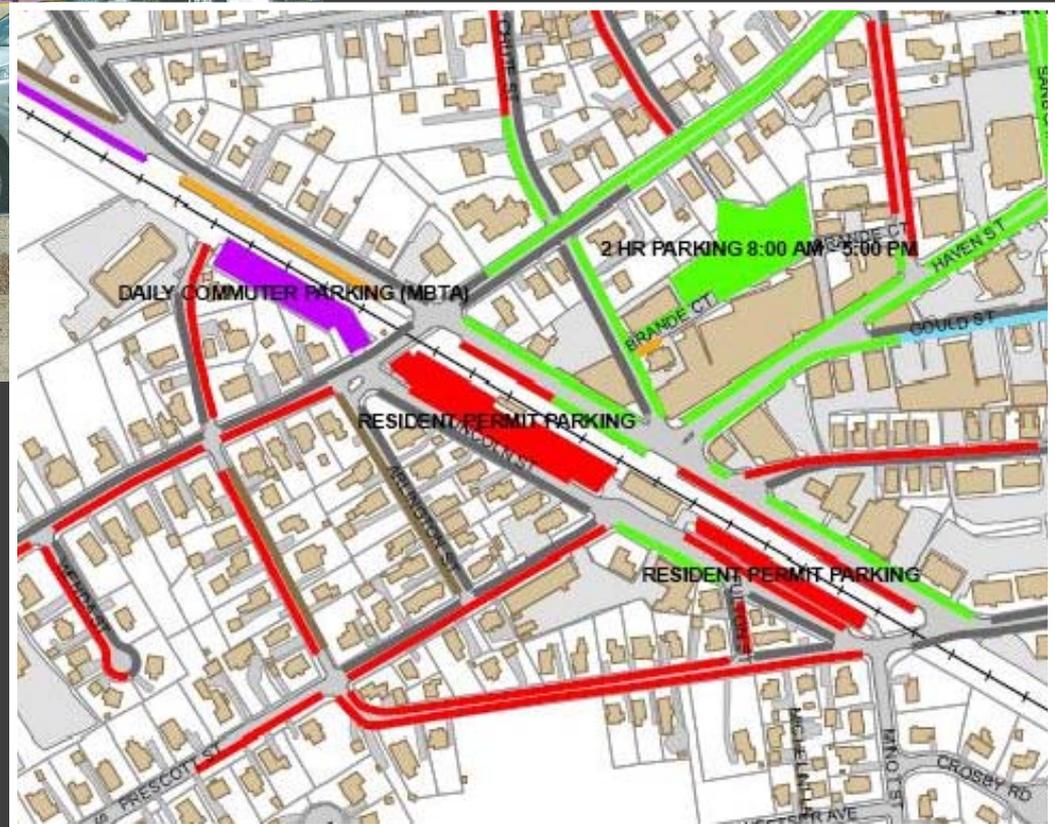


Commuter Permit Program

- On-street parking
- Time and day of week parking restrictions
- Commuters are gone by the time residents come home from work
- Generates additional revenue



Reading



Parking Management Plan

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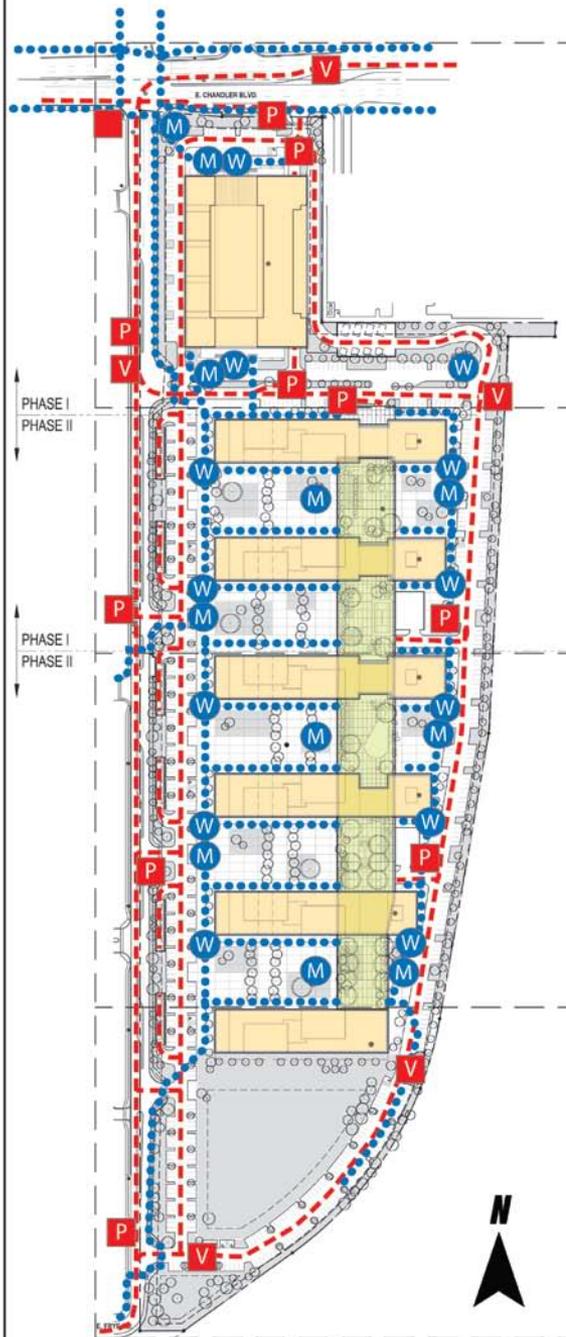
Best Practices

1. Demand-responsive parking management
2. Parking benefit districts
3. On-street commuter parking
4. Wayfinding and Public Easements

Recommendations

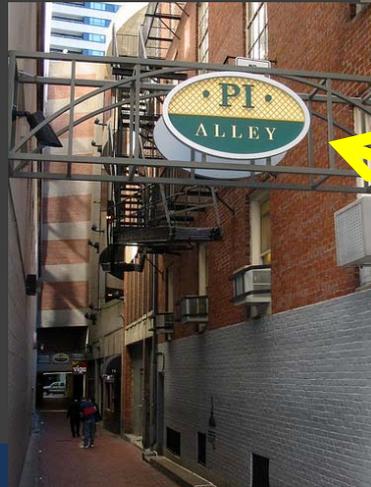
Signage





- - - Vehicular Pathways
- . . . Pedestrian Pathways
- P Parking Signage
- V Vehicular Signage
- W Ped/Walking Signage
- M Map
- Building

Pi Alley Boston



Parking Management Plan

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| 6. Balanced transportation system | | |

Convenient Technology

MULTI-SPACE PAY AND DISPLAY

- One meter serves multiple spaces, user displays receipt on dashboard
- Benefits:
 - Increases revenue
 - Reduces operations and enforcement cost
 - More payment options



Convenient Technology

MULTI-SPACE PAY BY SPACE

- One meter serves multiple spaces
- Benefits:
 - Same as Pay and Display
 - No need to return to car
 - Easy incorporation of Cell Phone payment options



Convenient Technology

MULTI-SPACE PAY BY SPACE

Lowell, MA

- 40 percent increase in collections
- 20 – 35 percent decrease in operations and enforcement costs



Pay by space post – Montreal

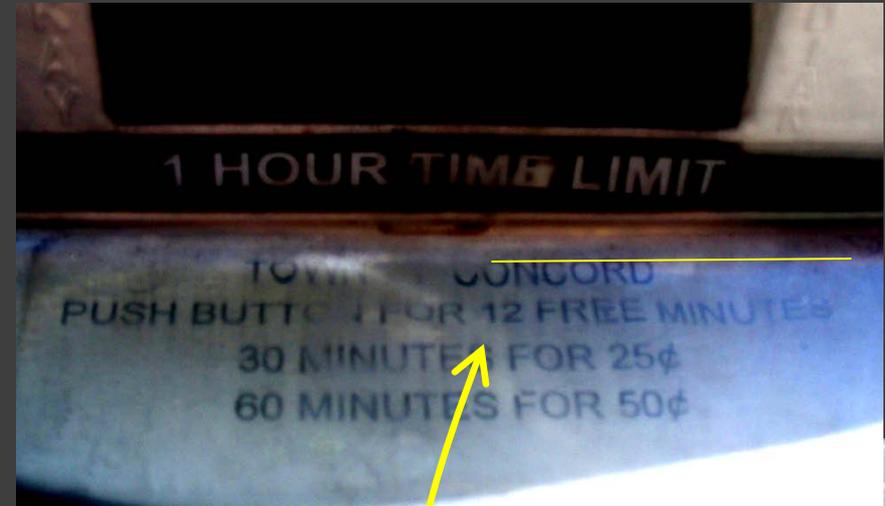
Image Credit: Flickr User [Solsken](#)



Convenient Technology

FIRST FEW MINUTES FREE BUTTON

- Button on meter allows for 10 – 15 free minutes
- Benefits:
 - Improves customer parking availability for short-term trips



Concord, MA



Convenient Technology

IN-CAR METERS

- Motorists display paid time on device in car
- Benefits:
 - Users only pay for time used
 - Good for frequent parkers



Parking Management Plan

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Best Practices

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4. Wayfinding and Public Easements
5. Convenient technology

Recommendations

1. Revise employee permits

1. Revise Employee Permits

- Reduce monthly permit price to incentivize remote parking
 - Incentivizes use of the back of the Claflin Lot for long-term parking and permit holders
 - Improves availability of closer customer spaces

Work days per month	20
Monthly permit	\$60
<hr/>	
Cost per day	\$3

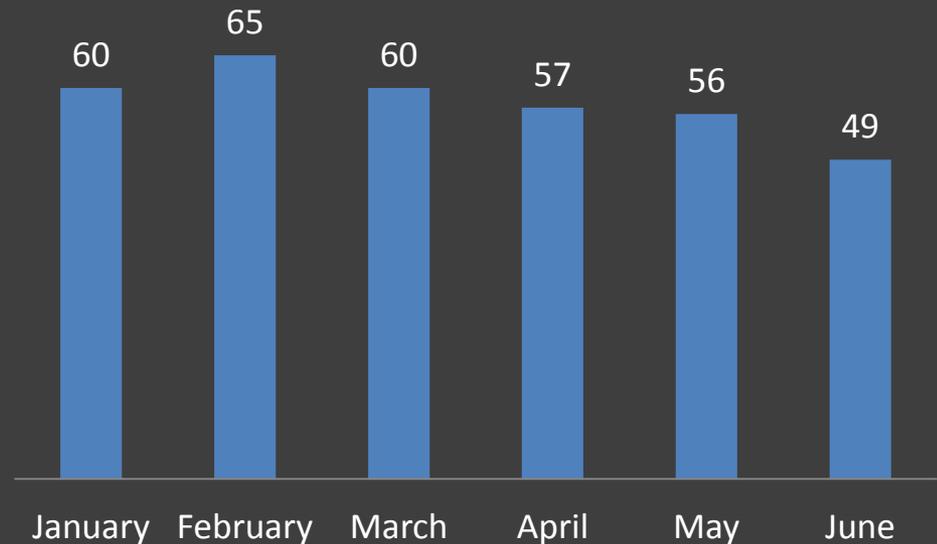
Cost per day (cash) \$3

Little/no incentive to buy permits

1. Revise Employee Permits

- Reduce monthly permit price to incentivize remote parking
 - Incentivizes use of the back of the Claflin Lot for long-term parking and permit holders
 - Improves availability of closer customer spaces

Permit Sales by Month 2011



1. Revise Employee Permits

- Improve convenience for employees to utilize remote parking
 - Introduce in-car meters for permit-holders
 - Introduce multi-space meters for daily parkers that accept debit/credit cards and coins – maybe add pay-by-cell phone



Parking Management Plan

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Best Practices

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2. Parking benefit districts
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Recommendations

1. Revise employee permits
2. Establish more convenient customer parking

GREGORY'S HOUSE OF PIZZA

GREGORY'S
HOUSE OF
PIZZA

PIZZA



BELMONT CENTER
DRY CLEANERS

beckie blue



DRY-CLEANING
SWEATERS & LEATHER
REWEAVING
REWEAVING
ALTERATIONS





2. Establish More Convenient Customer Parking

- Flip pricing to charge for most desirable spaces, making remote spaces cheapest
 - Drop price to park in Clafin Lot; Introduce pricing on Leonard Street (after 15 minute free period)
 - Encourages availability for customers
 - Parking rates may vary over time
 - Should be set to create 15% vacancy on each block face
 - Rates during low periods of demand should be free



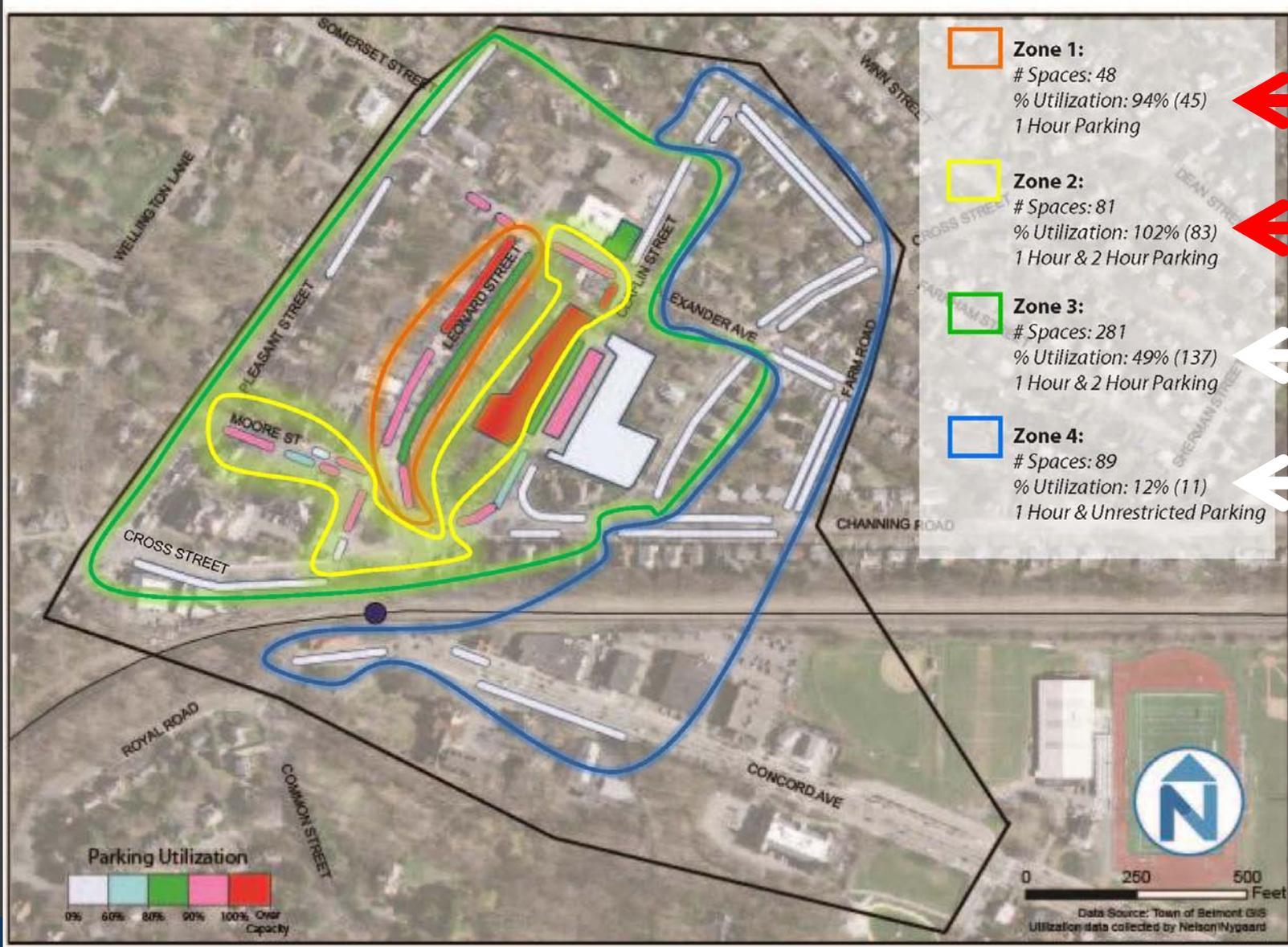
\$1.00

\$0.50

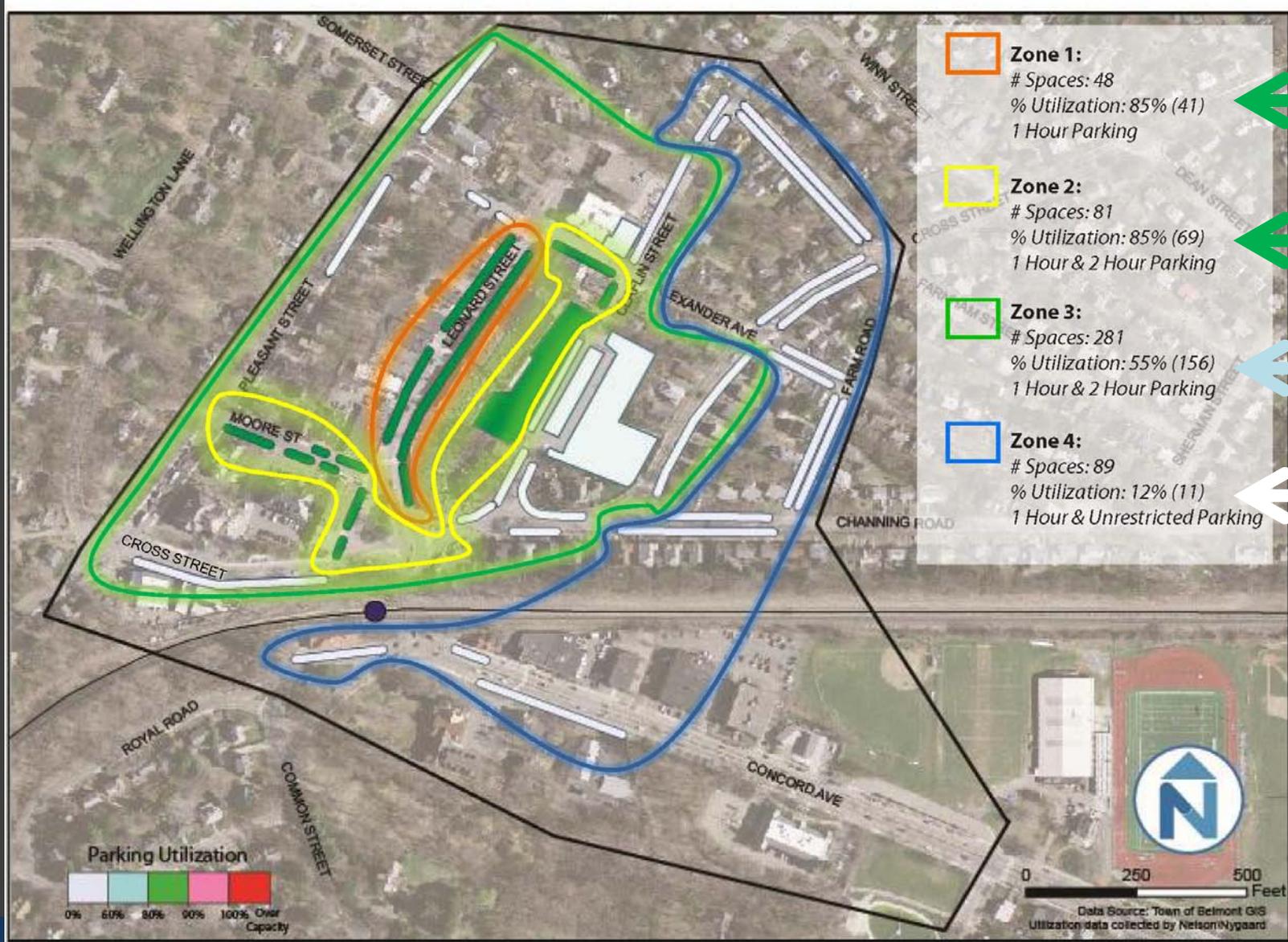
\$0.25

\$0/Permit

Utilization and Spillover



Utilization and Spillover



2. Establish More Convenient Customer Parking

- Lengthen/eliminate time limits in remote areas
 - Reduces pressure on prime short-term customer spaces
 - Demand-responsive pricing eliminates need for time limits

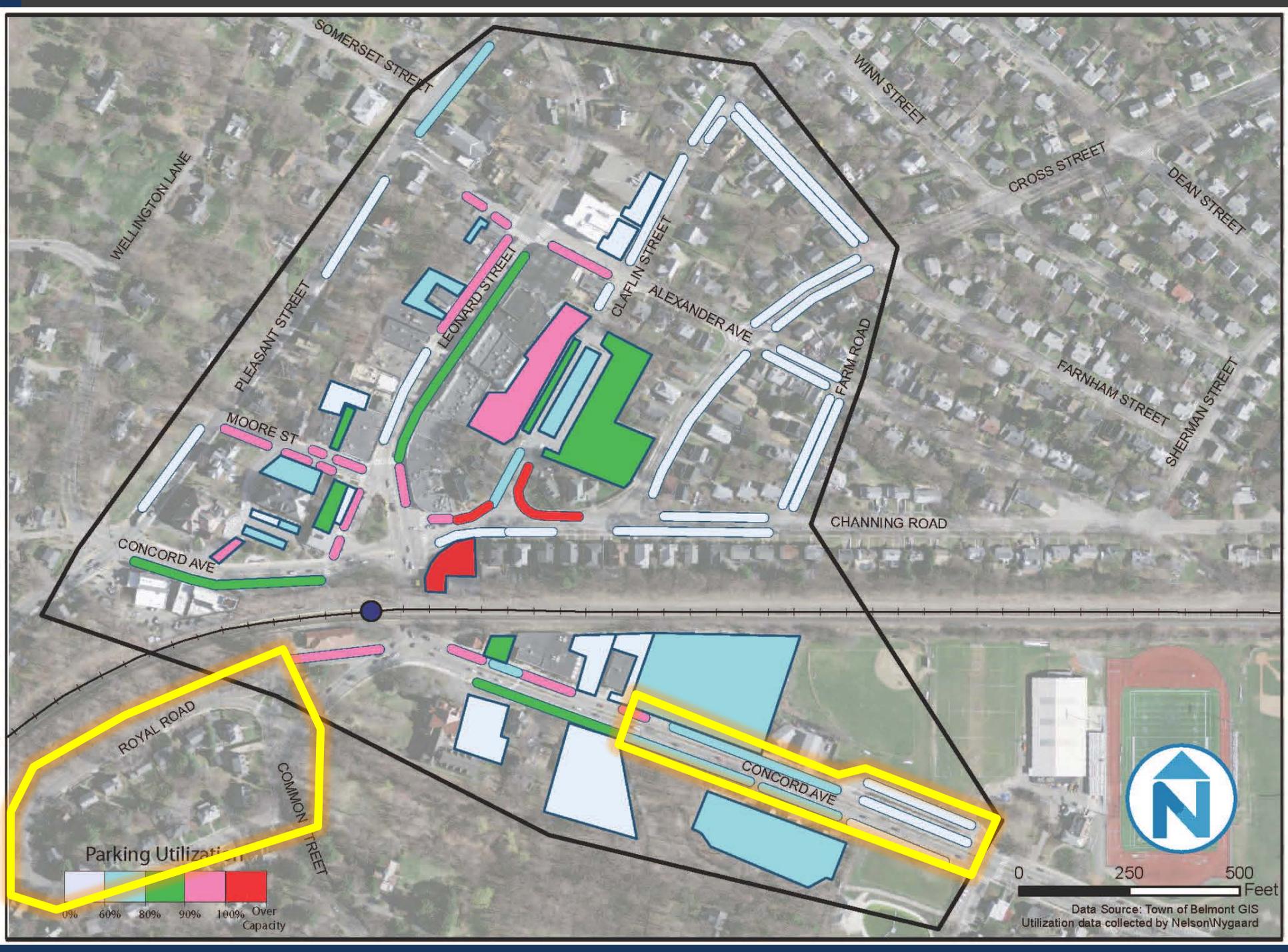
Parking Management Plan

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Best Practices

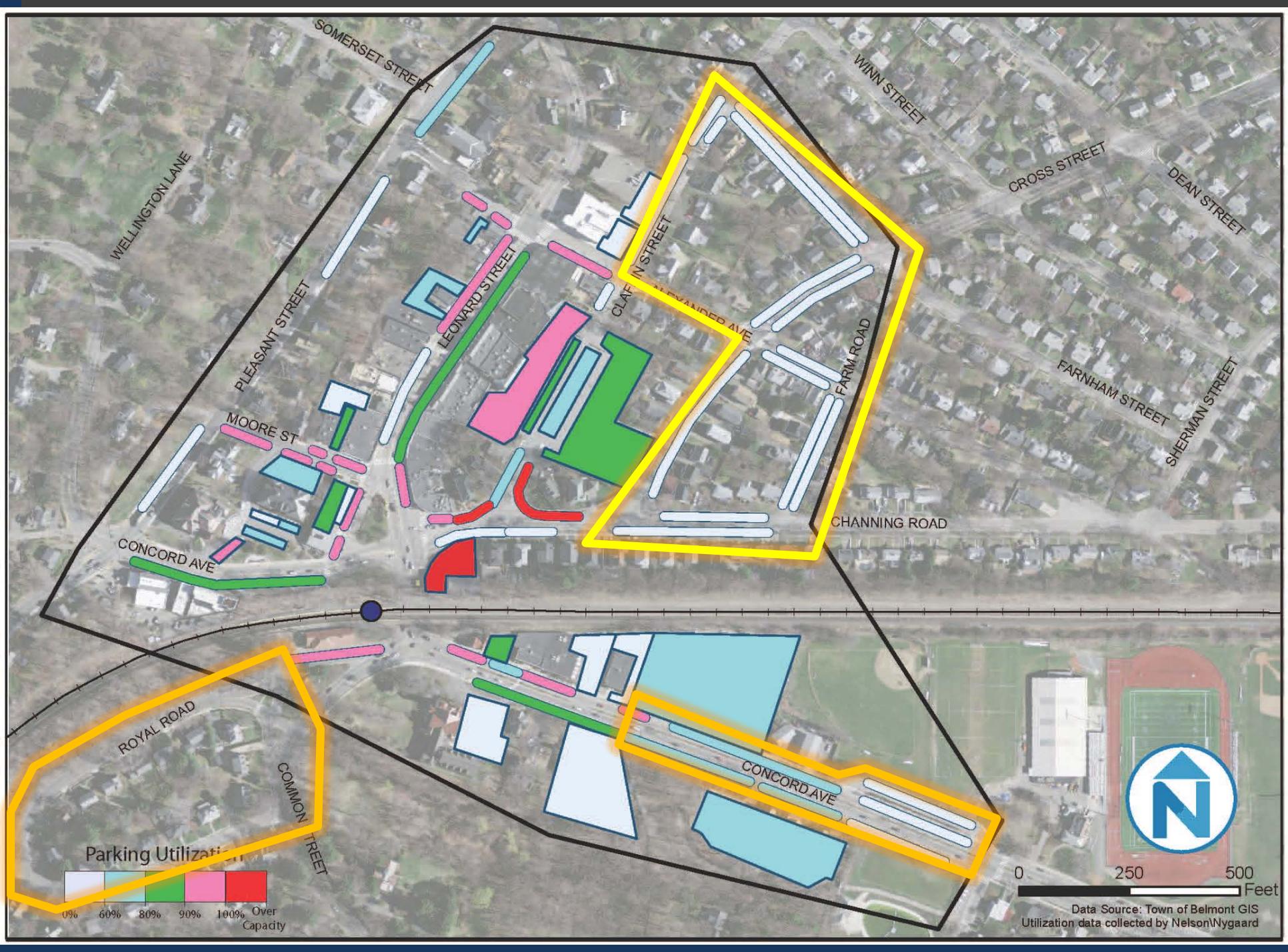
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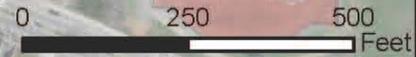
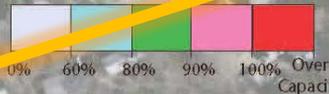


3. Introduce Commuter Parking

- Introduce town commuter parking with in-car meters
 - Takes advantage of underutilized capacity on Royal Road and Concord Avenue (new commuter capacity: 10 cars on Royal Road; 12-50 cars on Concord Avenue)
 - Relieves pressure on Clafin Lot to be more employee-oriented



Parking Utilization



Data Source: Town of Belmont GIS
Utilization data collected by NelsonNygaard

3. Introduce Commuter Parking

- Offer new commuter parking on residential streets with proceeds dedicated to local neighborhood fund
 - Residential streets are empty during the day – they do not get commuter spillover (with one exception)
 - Any residential street permits would be opt-in only: must be approved by majority on a block, block-by-block
 - All net revenue from permits would go to neighborhood fund (neighbors decide how to spend money)
- Residents also receive in-car meters
- Can be implemented on Claflin and other 2-hr. streets right away

Parking Management Plan

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| 3. No designated commuter parking | 3. On-street commuter parking | 3. Introduce commuter parking |
| 4. Lack of access/signage | 4. Wayfinding and Public Easements | 4. Improve connections & signing |
| 5. Outdated technology | 5. Convenient technology | |
| 6. Balanced transportation system | | |

4. Improve Pedestrian Connections and Signage

- Identify, sign, and improve connections through one or more buildings between Leonard Street and the Clafin Lot
 - Work with willing land-owners to add new signs and a map
 - Consider a dedicated 24/7 connection to be maintained by a parking fund



Starbucks as a Gateway



Potential Access Point

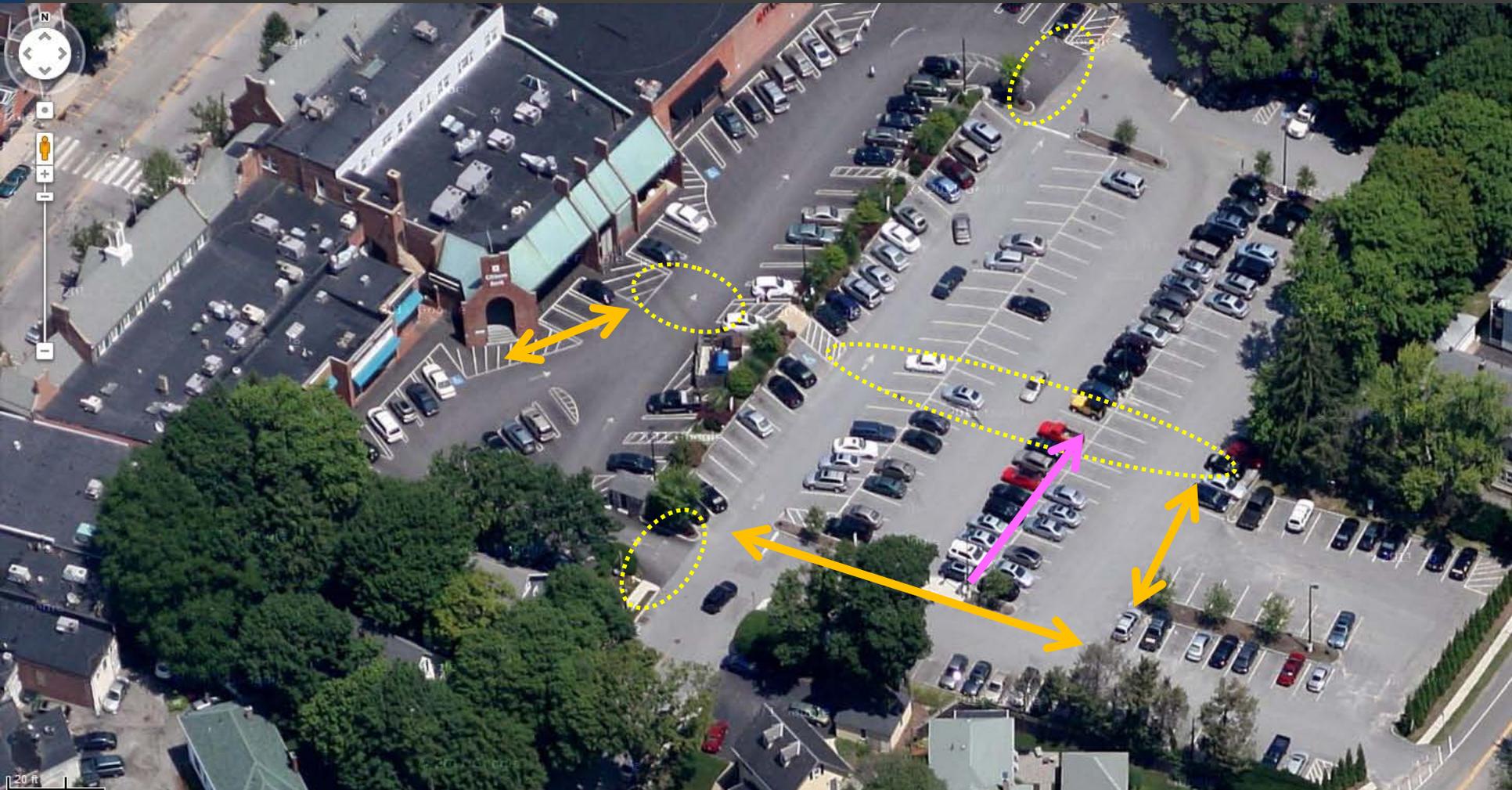


4. Improve Pedestrian Connections and Signage

- Improve lighting and sidewalks to and within the Claflin Lot
 - Wayfinding signs on Leonard
 - Complete sidewalks / crosswalks into Lot
 - New pedestrian-scale additions to light towers
 - Relocated payment island
- Install improved crosswalks
- Integrate signage around Belmont Center for drivers



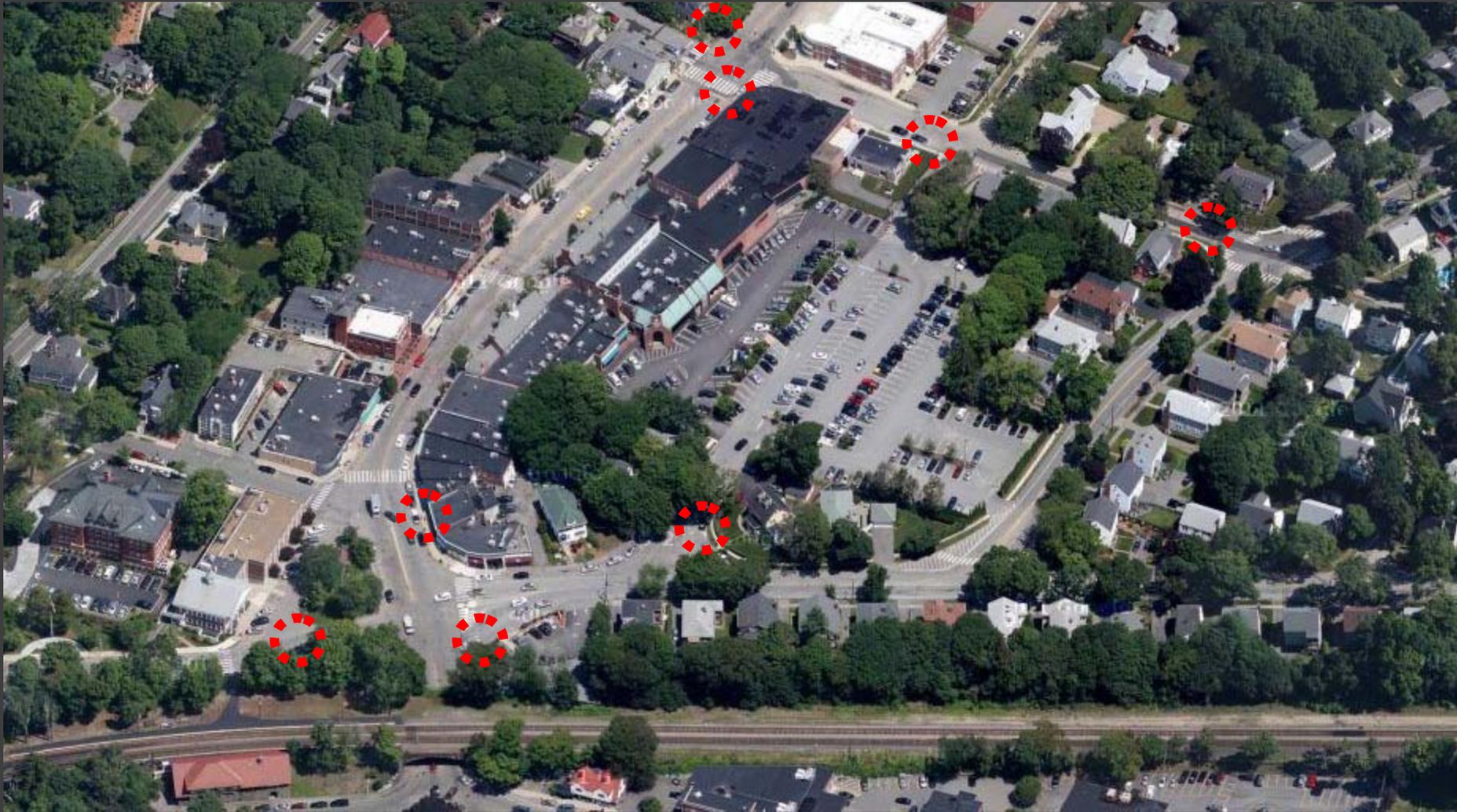
Clafin Lot Pedestrian Connections



Pedestrian Connections – Streetscape Plan Proposed



Recommended Signage Locations



Other Issues

- New parking supply will be needed in long-term
- Heavy reliance on sufficient off-street parking
- Business loading needs
- Lack of alternatives to the car

5. Increase parking supply
6. Bring Zipcar to Belmont
7. Change loading regulations in selected areas
8. Install bike racks

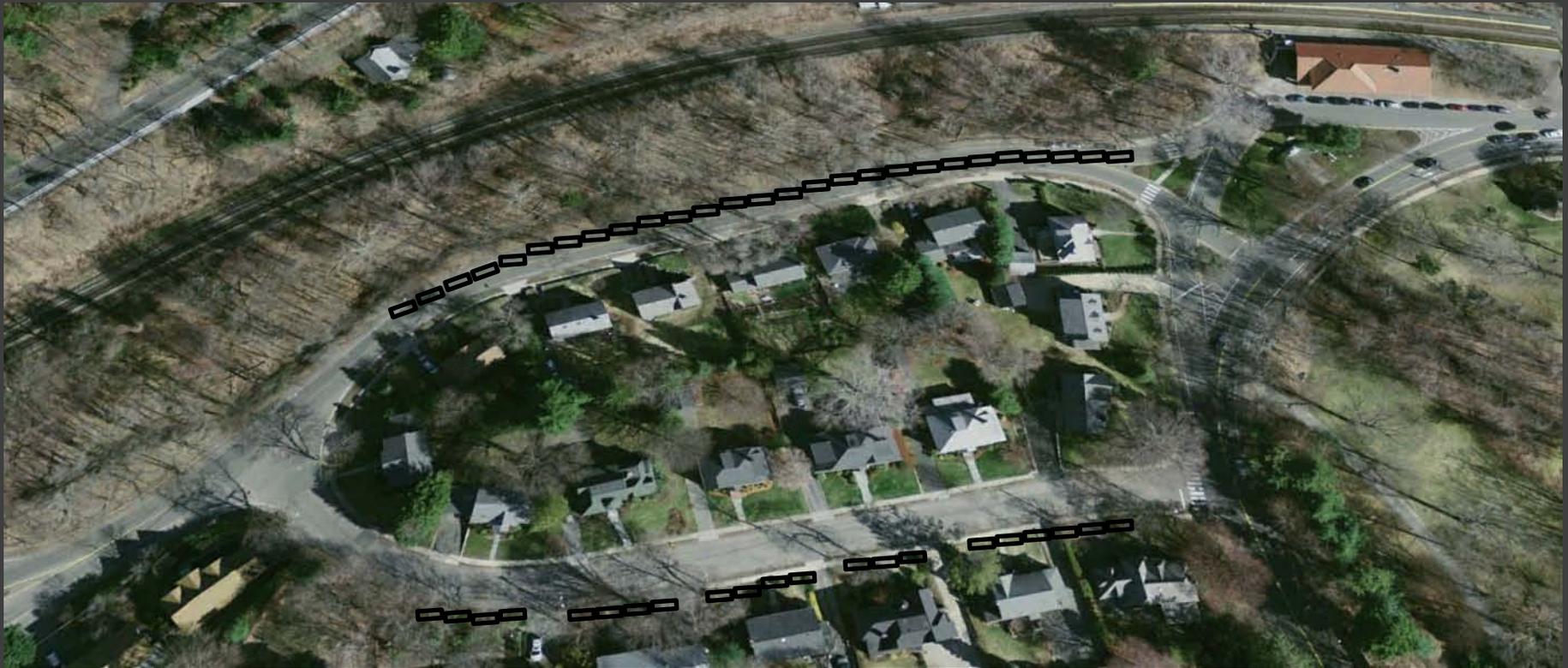
Other Strategies

- 5. Increase parking supply
 - On-street: Alexander



Other Strategies

- 5. Increase parking supply
 - On-street: Royal and Dunbarton



Other Strategies

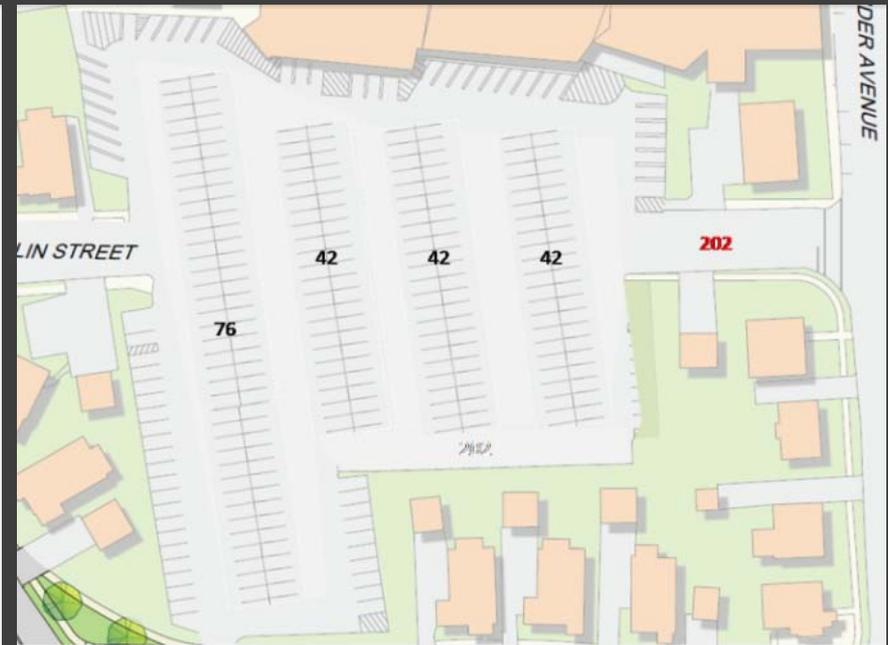
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 - On-street: Leonard



Other Strategies

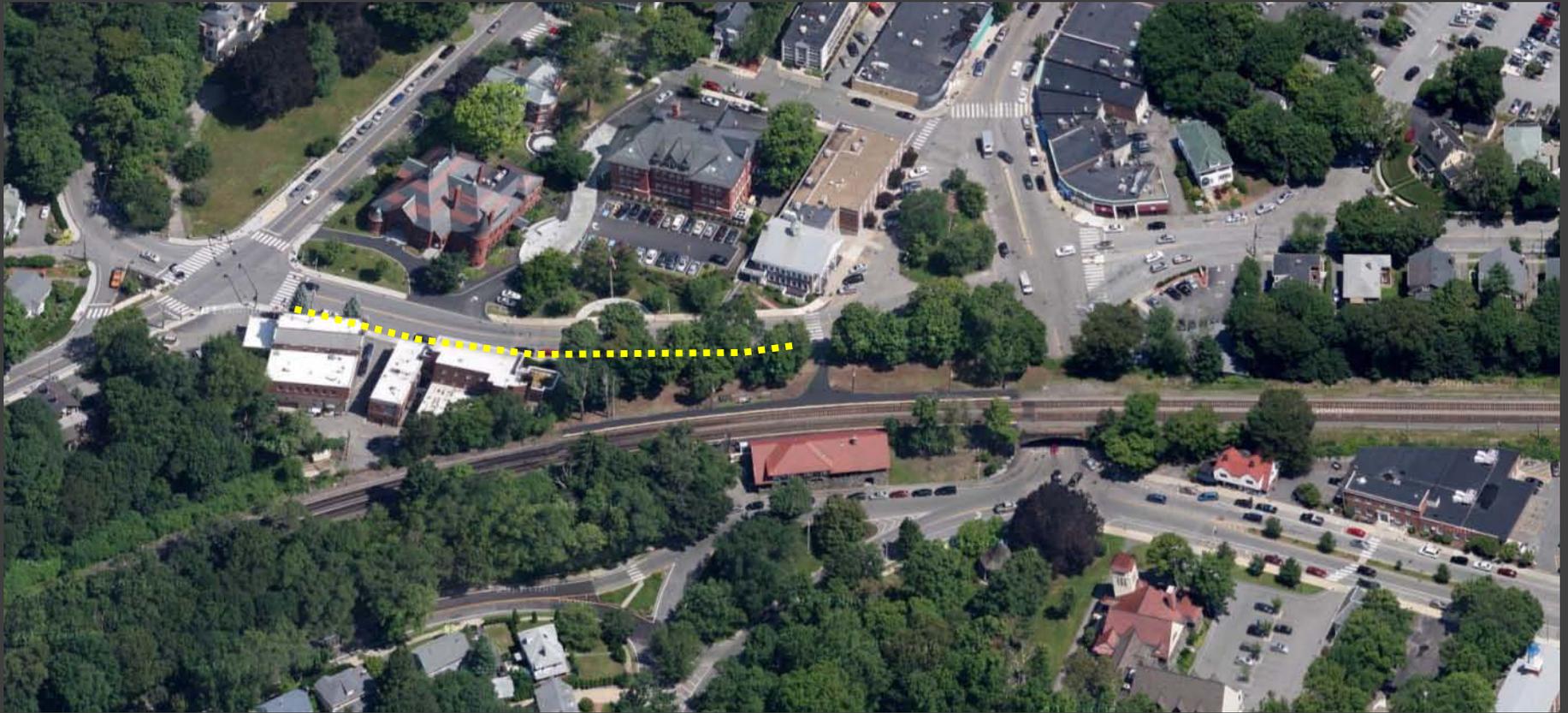
5. Increase parking supply

- Claflin Lot



Other Strategies

6. Bring Zipcar to Belmont



Other Strategies

7. Change loading regulations in selected areas
 - Evaluate loading zone on Leonard Street
 - Evaluate restricting trucks to load/unload during designated time periods (i.e. 6am – 9am)



Other Strategies

8. Install bike racks

- ABPB-compliant bike racks
- Incorporate bicycle parking facilities for new developments
- Encourage existing developments to make such improvements



“I would ride to work if there was a safe place to lock my bike.”

Discussion and Next Steps

